USGS science for a changing world

Earthquake Shaking — Red Alert

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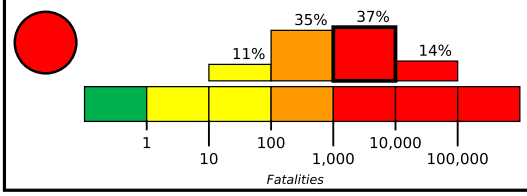
M 6.3, western Afghanistan

Origin Time: 2023-10-11 00:41:56 UTC (Wed 05:11:56 local)
Location: 34.5565° N 62.0449° E Depth: 9.0 km

PAGER Version 4

Created: 1 day, 0 hours after earthquake

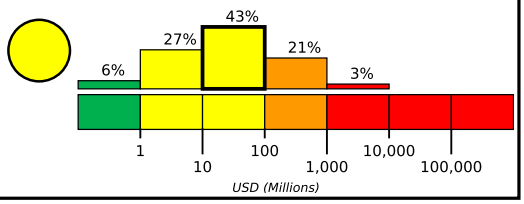
Estimated Fatalities



Red alert for shaking-related fatalities. High casualties are probable and the disaster is likely widespread. Past events with this alert level have required a national or international level response.

Yellow alert for economic losses. Some damage is possible. Estimated economic losses are less than 1% of GDP of Afghanistan.

Estimated Economic Losses

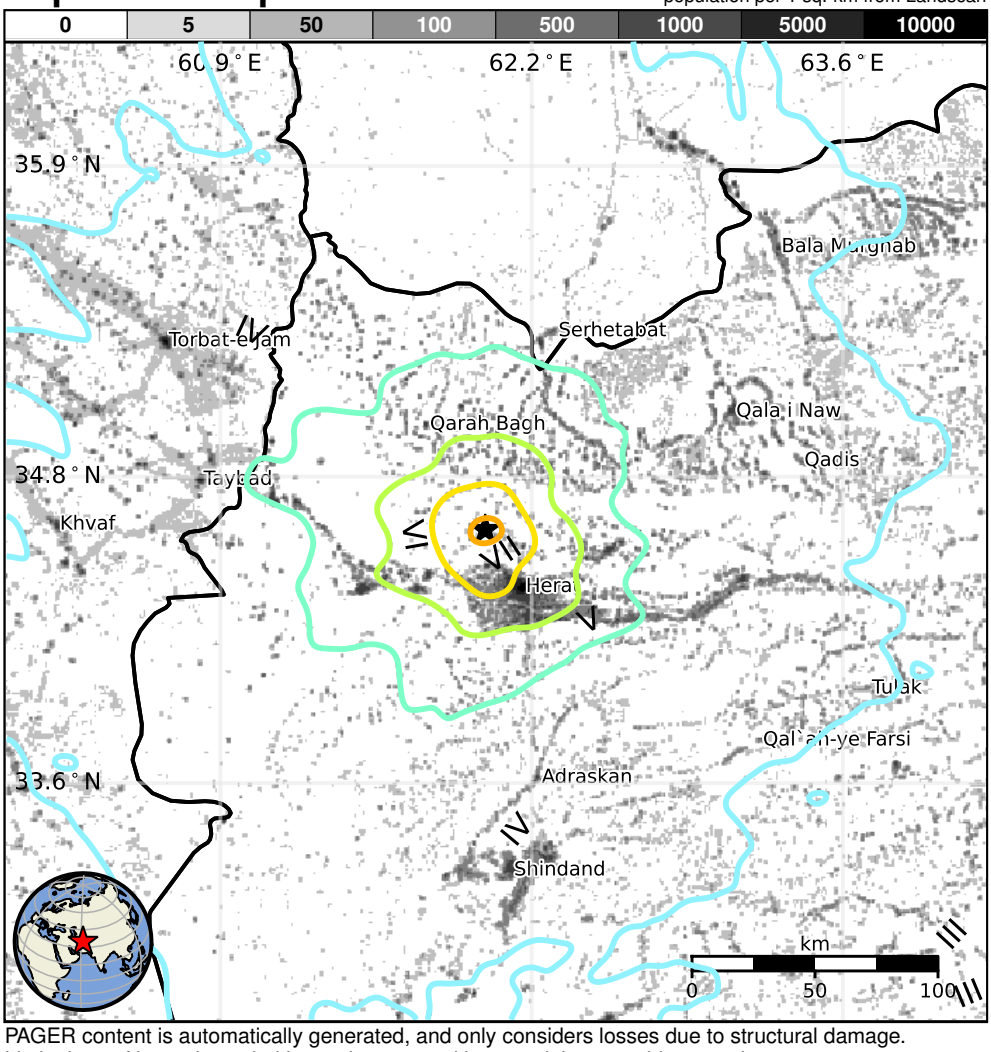


Estimated Population Exposed to Earthquake Shaking

ESTIMATED POPULATION EXPOSURE (k=x1000)		–*	444k*	2,218k	692k	900k	373k	4k	0	0
ESTIMATED MODIFIED MERCALLI INTENSITY		I	II-III	IV	V	VI	VII	VIII	IX	X+
PERCEIVED SHAKING		Not felt	Weak	Light	Moderate	Strong	Very Strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	Resistant Structures	None	None	None	V. Light	Light	Moderate	Mod./Heavy	Heavy	V. Heavy
	Vulnerable Structures	None	None	None	Light	Moderate	Mod./Heavy	Heavy	V. Heavy	V. Heavy

*Estimated exposure only includes population within the map area.

Population Exposure



Structures

Overall, the population in this region resides in structures that are vulnerable to earthquake shaking, though resistant structures exist. The predominant vulnerable building types are adobe block and unreinforced brick with mud and timber post construction.

Historical Earthquakes

Date (UTC)	Dist. (km)	Mag.	Max MMI(#)	Shaking Deaths
1997-05-10	221	7.2	VIII(16k)	2k
1979-11-14	222	6.5	VI(4k)	280
1968-08-31	289	7.2	IX(3k)	15k

Recent earthquakes in this area have caused secondary hazards such as landslides that might have contributed to losses.

Selected City Exposure

from GeoNames.org

MMI	City	Population
VI	**Herat**	**273k**
VI	Injil	<1k
VI	Rabat-e Sangi-ye Pa'in	<1k
VI	Zindah Jan	10k
VI	Chahar Burj	12k
VI	Guzarah	<1k
IV	**Torbat-e Jam**	**59k**
IV	**Taybad**	**38k**
IV	**Shindand**	**29k**
IV	**Qala i Naw**	**9k**
IV	Ghormach	30k

bold cities appear on map. (k=x1000)

PAGER content is automatically generated, and only considers losses due to structural damage. Limitations of input data, shaking estimates, and loss models may add uncertainty.

https://earthquake.usgs.earthquake.gov/earthquakes/eventpage/us6000len8#pager

Event ID: us6000len8